

In order that it may follow such a curved track, the pivot for this lever arm is carried by a truck 178 which, in turn, comprises a body portion and four wheels 179 which ride in the track. The truck 178 may be driven around the track by a continuous chain drive 181, such as shown schematically in dotted lines in FIG. 17. Otherwise the structure of this taping head is essentially the same as those of the previous embodiments. The arrangement allows the taping head to apply only an L shaped length or "clip" to the upper corner of the box as shown in FIG. 17, or to apply a full sized L shaped clip extending from the top down one side and around the bottom of the box as shown in FIGS. 16 and 18. Apparatus of this type may be regulated to apply an L or a U shaped clip merely by adjusting the timing mechanisms.

In all of the electro-pneumatic devices referred to hereinbefore, conventional equipment and circuitry may be employed to drive and control the various pneumatic cylinders from conventional electric limit switches and similar devices.

Although the taping heads in all of the embodiments shown operate on the corners presented at the bottom of the box, it is an important advantage of this invention that the heads may be arranged to move vertically, upside down, cross-ways, etc., to apply tape to two vertical surfaces, to the top of a horizontal surface and an abutting vertical surface, or the like; as well as to operate at any angle which may be dictated by the shape of the article to be taped.

Having now described the invention in specific detail and exemplified the manner in which it may be carried into practice, it will be readily apparent to those skilled in the art that innumerable variations, modifications, applications, and extensions of the basic principles involved may be made without departing from its spirit and scope.

The invention claimed is:

1. A taping device comprising a lever arm mounted for pivotal movement about a pivot at one end of the arm and forward movement of said pivot from an initial to a terminal position in a predetermined linear path; said lever arm normally being urged to an extended position with the end of said arm, opposite to said pivot, away from said linear path; roller supporting means mounted on said lever arm adjacent the opposite end of said arm for movement with respect to said arm from one position to another; an applicator roller rotatably mounted on said supporting means; said roller together with its supporting means, in the extended position of said lever arm and during the forward motion of said arm, being adapted to move in an initial path parallel to the linear path of said pivot; means responsive to the positioning of an article having a substantially rectangular corner to be taped in front of said lever arm in the initial path of said applicator roller to cause said arm and said roller to begin forward movement toward said article; tape holding means connected to said lever arm for positioning the free end of the tape between said roller and said article as the roller advances toward said article; positioning means connected to said roller supporting means for controlling the position of said roller with respect to said lever arm and said tape holding means; the continued forward movement of said lever arm causing said roller to press the free end of the tape against the side of the article and thereafter causing said lever arm to pivot backwardly toward said linear path and said roller to move over the article away from the free end of the tape while pressing said tape into adhesive contact with said article; said positioning means being activated to reverse the movement of said roller, after the roller adheres a portion of the tape to said article, and cause said roller to move back over the tape to a new position on said article beyond the end of the tape, thereby assuring that the end of the tape is pressed into adhesive contact with the article; the applicator roller in its new position being

spaced substantially from said tape holding means and being held in that position by said positioning means as the lever arm continues its forward linear motion; further forward movement of said lever arm causing said lever arm to pivot further backwardly and allow said roller to move around said article while pressing said tape into further contact with the article; cutting means mounted for movement between said roller and said tape holding means in a given position of said lever arm and presenting an edge for slicing through said tape during said movement; and automatic means for initiating the movement of said cutting means when the given position of said lever arm is reached.

2. A taping device comprising a lever arm mounted for pivotal movement about a pivot at one end of the arm and forward movement of said pivot from an initial to a terminal position in a predetermined linear path; said lever arm normally being urged to an extended position with the end of said arm, opposite to said pivot, away from said linear path; an applicator roller mounted from said lever arm adjacent the opposite end of said arm for movement, in the extended position of said lever arm and during the forward motion of said arm, in an initial path parallel to the linear path of said pivot; means responsive to the positioning of a rectangular article to be taped in front of said lever arm in the initial path of said applicator roller to cause said arm and said roller to begin forward movement toward said article; tape holding means connected to said lever arm for positioning the free end of the tape between said roller and said article as the roller advances toward said article; the continued forward movement of said lever arm causing said roller to press the free end of the tape against the side of the article and thereafter causing said lever arm to pivot backwardly toward said linear path and said roller to move over the article away from the free end of the tape while pressing said tape into adhesive contact with said article; further forward movement of said lever arm causing said lever arm to pivot further backwardly and allow said roller to move around a corner of said article while pressing said tape into further contact with the next side of said article; cutting means mounted for movement between said roller and said tape holding means in a given position of said lever arm and presenting an edge for cutting through said tape; and automatic means for initiating the movement of said cutting means and causing said tape to be cut by said edge when the given position of said lever arm is reached.

3. A taping device according to claim 2, which further comprises supporting means for said applicator roller mounted on said lever arm adjacent the opposite end of said arm for movement with respect to said arm from one position to another; and positioning means connected to said roller supporting means for controlling the position of said roller with respect to said lever arm and said tape holding means; said positioning means being activated to reverse the movement of said roller, after the roller adheres a portion of the tape to said article but before the roller rounds the corner of said article, and cause said roller to move back over the tape to a new position on said article beyond the end of the tape, thereby assuring that the end of the tape is pressed into adhesive contact with the article; the applicator roller in its new position being spaced substantially from said tape holding means and being held in that position by said positioning means as the lever arm continues its forward linear motion.

4. A taping device according to claim 3, wherein said roller supporting means is in the form of a connecting arm pivotally supported at one end from the opposite end of the lever arm, the applicator roller being mounted from the other end of said connecting arm and the positioning means being connected to said connecting arm between its ends to swing the arm from one position to another.